

CONDUIT AND CABLE SCHEDULE STAGE II AND III

Sheet 113 of 224

CONDUIT DESIGNATION	CIRCUIT No.	FROM	TO	SERVICE	CONDUIT NUMBER OF SETS	CONDUIT SIZE	CABLE (PER CDT.) OR BUSWAY NUMBER & SIZE	TYPE	REMARKS	CONDUIT DESIGNATION	CIRCUIT No.	FROM	TO	SERVICE	CONDUIT NUMBER OF SETS	CONDUIT SIZE	CABLE (PER CDT.) OR BUSWAY NUMBER & SIZE	TYPE	REMARKS
MEDIUM VOLTAGE 15KV CABLE (SEE DWG. #E-25, RISER DIAGRAM)										FDR'S - TRANSFER FROM EXIST. SWGR "R" BUS (SEE DWG. #E-26, ONE LINE DIAGRAM)									
PF-A5B	—	EXIST. 15KV SPLICE CABINET	BKR. #HV-B1	13.8KV	1	4"	3-350MCM	EPR	"Y" SPLICE TO EXISTING RISER CABLE	R-4	1-4	SWGR. BUS #1	ATS #41SR	480V	4	3"	3-350MCM	XHHW-2	
PF-A5B TEMP	—	BKR. #HV-B1	EXIST. TR-5	13.8KV	1	4"	3-350MCM	EPR	TEMPORARY FDR.		—	ATS #41SR	SWGR. BUS #EL	480V	4	3"	3-350MCM	XHHW-2	RUN FEEDERS BETWEEN EQUIPMENT
PF-A6B	—	EXIST. 15KV SPLICE CABINET	BKR. #HV-B2	13.8KV	1	4"	3-350MCM	EPR	"Y" SPLICE TO EXISTING RISER CABLE	R-5	2-4	SWGR. BUS #2	MCC-MS41R	480V	3	3 1/2"	3-500MCM	XHHW-2	①
PF-A6B TEMP	—	BKR. #HV-B2	EXIST. TR-6	13.8KV	1	4"	3-350MCM	EPR	TEMPORARY FDR.	R-7	2-3	SWGR. BUS #2	DINING FACILITY	480/277V	1	3 1/2"	4-500MCM	XHHW-2	②
PF-A7B	—	EXIST. 15KV SPLICE CABINET	BKR. #HV-B3	13.8KV	1	4"	3-350MCM	EPR	"Y" SPLICE TO EXISTING RISER CABLE	R-8	1-3	SWGR. BUS #1	DAI-ICNI BANK C.T. CABINET	480V	1	3 1/2"	3-500MCM	XHHW-2	②
PF-A7B TEMP	—	BKR. #HV-B3	EXIST. TR-7	13.8KV	1	4"	3-350MCM	EPR	TEMPORARY FDR.	R-9I	2-6	SWGR. BUS #2	EXIST. P.B. #1	480V	1	2 1/2"	3-#4/0	XHHW-2	
PF-A8B	—	EXIST. 15KV SPLICE CABINET	BKR. #HV-B4	13.8KV	1	4"	3-350MCM	EPR	"Y" SPLICE TO EXISTING RISER CABLE	1-6	1-6	SWGR. BUS #1	P.N.L. DP-41S	480/277V	2	3 1/2"	4-500MCM	XHHW-2	REMOVE TEMP. FDR. R-9-TEMP INSTALLED IN STAGE I
PF-A8B TEMP	—	BKR. #HV-B4	EXIST. TR-8	13.8KV	1	4"	3-350MCM	EPR	TEMPORARY FDR.										
FDR'S - TRANSFER FROM EXIST. SWGR "L" BUS (SEE DWG. #E-26, ONE LINE DIAGRAM)										FDR'S - TRANSFER FROM EXIST. SWGR BUS "EL" (SEE DWG. #E-26, ONE LINE DIAGRAM)									
L-1	3-5	SWGR. BUS #3	ATS #41SL	480V	5	3 1/2"	3-500MCM	XHHW-2		R-10	EL-1	SWGR. BUS #EL	EXIST. P.B. #1	480V	1	2 1/2"	3-250MCM	XHHW-2	②
	—	ATS #41SL	EDP #EL-A41EW-B	480V	5	3 1/2"	3-500MCM	XHHW-2	①	R-11	EL-2	SWGR. BUS #EL	EXIST. P.B. #1	480V	1	3 1/2"	3-500MCM	XHHW-2	②
L-2	3-4	SWGR. BUS #4	P.B. #11	480V	1	3 1/2"	3-350MCM	XHHW-2		R-12	EL-3	SWGR. BUS #EL	EXIST. P.B. #1	480V	1	3 1/2"	3-500MCM	XHHW-2	②
L-3-TEMP	4-3	SWGR. BUS #4	TRANSF. #TR-L3	480V	2	3 1/2"	3-500MCM	XHHW-2	①	R-13	EL-4	SWGR. BUS #EL	ELEV. DISTRIBUTION P.N.L. #EL-A42B	480V	2	3"	3-350MCM	XHHW-2	①
L-3	4-1	SWGR. BUS #4	TRANSF. #TR-L3	480V	2	3 1/2"	3-500MCM	XHHW-2		EMERG. POWER FDR'S FROM ELEC. CLOSET "C" (SEE DWG. #E-26, ONE LINE DIAGRAM UNLESS OTHERWISE NOTED)									
L-3	—	CB-L3	EXIST. 1600A BUSWAY	208/120V	1	—	2000A BUSWAY	3# F.N. GND.	③	A-2	—	EXIST. POW. CONTR. EPC-41A	ATS-41SL	480V	2	3 1/2"	3-500MCM	XHHW-2	VIA P.B. #15
L-4a	4-2	SWGR. BUS #4	BUSWAY CAP	480/277V	1	—	2000A BUSWAY	3# F.N. GND.	③	A-3	—	EXIST. P.B. #1	ATS-41SR	480V	1	2"	3-#3/0	XHHW-2	②
L-4b	3-2	SWGR. BUS #3	EXIST. 1600A BUSWAY	480/277V	1	—	2000A BUSWAY	3# F.N. GND.	③		—	PANEL #E-41A	P.B. "A"	208V	1	1 1/4"	2 #2	XHHW-2	SEE DWG. #E-93 ONE LINE DIAGRAM & PLAN
L-7	4-4	SWGR. BUS #4	MCC-MS41L	480V	3	3 1/2"	3-500MCM	XHHW-2		E-CP-41-S	—	P.B. "A"	DISC. SW. NORM. & U.P.S.	208V	1	1 1/4"	2 #2	XHHW-2	
L-8I	4-5	SWGR. BUS #4	TS-41S-F	480V	3	3 1/2"	3-500MCM	XHHW-2		UPS-41S	—	U.P.S.	PANEL CP-41S	120/240V	1	1 1/4"	3 #2	XHHW-2	SEE DWG. #E-103, EXTEND FDR'S. TO TEMP. UPS
	—	TS-41S-F	EXIST. FIRE PUMP CONTROL STATION	480V	3	3 1/2"	3-500MCM	XHHW-2		CP-41-BP	—	PULL BOX	UPS-SS41S	120/240V	1	1 1/4"	3 #2	XHHW-2	BY PASS POWER FOR SS-41S UPS SEE DWG. #E-93 & #E-103
R-1-TEMP	3-3	SWGR. BUS #3	TRANSF. #TR-R1	480V	2	3 1/2"	3-500MCM	XHHW-2	①	E-SB-SE	—	PANEL #E-41A	PULL BOX	208/120V	1	2"	3 #4/0	XHHW-2	SEE DWG. #E-93 ONE LINE DIAGRAM & PLAN
FDR'S - TRANSFER FROM EXIST. SWGR "R" BUS (SEE DWG. #E-26, ONE LINE DIAGRAM)										TEMPORARY 480/277V. BUSWAY									
R-1						3 1/2"	3-500MCM	XHHW-2		B6	—	TS-41S-F	P.B. #1	480V	2		3-500MCM	XHHW-2	②
							1-#2/0	GND.									1-#	GND.	SWBD. AND GENERATOR
R-1	—	CB-R1	EXIST. 1600A BUSWAY	208/120V	1	—	2000A BUSWAY	3# F.N. GND.	③										
R-2a	1-2	SWGR. BUS #1	BUSWAY CAP	480/277V	1	—	2000A BUSWAY	3# F.N. GND.	③										
R-2b	2-2	SWGR. BUS #2	EXIST. 1600A BUSWAY	480/277V	1	—	2000A BUSWAY	3# F.N. GND.	③				EXIST. COLLE						
R-3	2-7	SWGR. BUS #2	EXIST. WIREWAY	480V	1	3 1/2"	3-500MCM	XHHW-2	①										
							1-#1/0	GND.											
I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF CONTRACT NO. WTC-802.071 IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.																			
DATE 6/21/95 S. Sultan, A. Sultan SPEC. WRITER																			
DATE 8/15/95 Peter K. Swenson ENGINEER OF DESIGN																			

① - REMOVE EXIST. & INSTALL COPPER CABLE LUGS
② - SPLICE TO EXIST. AL. CABLE
③ - CONNECT TO EXIST. AL. BUSWAY

THE PORT AUTHORITY
OF NY & NJ

Peter K. Swenson
ENGINEERING PROGRAM MANAGER
WORLD TRADE CENTER
CHIEF ELECTRICAL ENGINEER

Engineering Department
Design Division

The World Trade
Center
Electrical/HVAC
Upgrade Program

Title
TOWER ONE AND TWO
LOW VOLTAGE
SUBSTATIONS
CONSTRUCTION AND
INSTALLATION

ELECTRICAL

SUBSTATION SS-41S
STAGE II AND III
CONDUIT AND CABLE
SCHEDULE

No. Date Revision Approved
This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.
LEAHY/FISCHER
Designed by LEAHY Drawn by A.S. Checked by
Date 5-1-85 Scale NONE
Contract Number WTC 802.071 Drawing Number E-27